



Naval Air Station South Weymouth, MA Restoration Advisory Board (RAB) Meeting Minutes January 12, 2012

1. INTRODUCTIONS/ APPROVAL OF PRIOR MEETING MINUTES

John Goodrich, RAB facilitator, opened the meeting at approximately 7:00 PM. He requested that all attendees, including RAB members, regulators, and audience members, introduce themselves. He noted that the meeting agenda, handouts, and the sign-in sheet were available on the table at the back of the room. The sign-in sheet for the meeting is provided as Attachment A. J. Goodrich asked if everyone had time to read the minutes from the November 2011 RAB meeting and if there were any comments. D. Galluzzo stated that he felt details of his November RAB meeting comments were left out of the minutes. At the November RAB, he'd stated that the Parkway ESD had been sterilized. He had asked what scientific data supported the changed position of the regulators and the Navy to abandon the protection, integrity, and long established maintenance protocols of the installed cap of the RDA. He raised a concern about the quality of the document, which was not identified as a draft but was defended as a draft after it was challenged, and added that is a reason to suspect that all documents are inaccurate. M. Parsons stated that the parkway was not reconfigured by SSTTDC based on sensitivity to people's comments, it was the fact that another agency told them it was going to be a 2-lane highway in that area.

J. Goodrich reviewed the guidelines for the meeting and reminded everyone that the focus of the meeting is cleanup issues. Any issues and/or comments not related to base cleanup will be noted and referred to the appropriate agency or organization. He reminded the participants when asking questions to wait to speak until they are acknowledged, to state their names and affiliations, and to speak clearly or into the microphone when they have questions.

He then reviewed the agenda for the meeting. The meeting agenda and the action item tracking list are provided as Attachment B. In accordance with the agenda, the presentation and discussion would be followed by the updates and action items portion of the meeting. The minutes, agenda and action items for the meeting are posted on the BRAC PMO website: http://www.bracpmo.navy.mil/.

2. PRESENTATION

J. Goodrich introduced Phoebe Call and Dave Barney to give the presentation on the Perfluorinated Compounds (PFCs) Investigation. The referenced slides are included in Attachment C.

D. Galluzzo asked if they would be given a chance to ask questions about the subject matter of the last RAB. J. Goodrich stated that, as has been the case, questions related to the cleanup will be addressed and questions related to the development will have to be answered by the appropriate party.

P. Call began the PFC presentation; the objectives of the presentation are shown on Slide 2. The last time PFCs were discussed was at the December 2010 RAB, after the first groundwater investigation was completed in April 2010. A second PFC investigation was conducted in April 2011. The PFC investigation concerns the use of Aqueous Film Forming Foam (AFFF). Slide 3 presents information on AFFF and PFCs. AFFF was primarily used in Hangar 1 where it was stored and used if there were aircraft fires; AFFF was also used at the Fire Fighting Training Area (FFTA) for training exercises. These areas were the focus of the original 2010 investigation and continued to be the focus of the investigation this past year. The samples collected were analyzed for two PFCs, PFOA and PFOS. For these two compounds there is an EPA Public Health Advisory for drinking water which was established in 2009. There have been no other criteria developed by EPA for other media.

AFFF was used at the FFTA and stored and used in Hangar 1; releases were documented in Hangar 1. Based on the April 2010 groundwater data presented in the September 2010 Groundwater Project Report, it was determined that further investigation was needed. Specifically, it was decided that additional groundwater samples and also soil, surface water, and sediment samples would be collected. A Sampling and Analysis Plan Addendum was prepared and the majority of the work was completed in April 2011. The remaining soil samples were collected in December 2011, after the asbestos abatement in Hangar 1 was completed.

The objective of the investigation, consistent with Navy's emerging contaminant policy, was to collect samples to determine if the compound is present. Since PFCs were found in groundwater in 2010 at high concentrations, the extent of the PFC contamination in groundwater had to be determined. The objective of the 2011 investigation for soil, surface water, and sediment was to determine the presence or absence of PFCs. The highest PFC concentrations detected in 2010 were around the FFTA. There were exceedances of the Provisional Health Advisory values at both FFTA and Hangar 1. At Hangar 1 the groundwater flow is south/southwest towards French Stream and at FFTA groundwater flows west/southwest generally towards French Stream.

The SAP Addendum included installing and sampling new wells and collecting groundwater from other existing wells. Soil borings were advanced near the wells sampled in 2010, to see if there was a correlation between the two media. Slide 4 presents the 2011 sample locations. A new shallow and deep well couplet was installed downgradient of both Hangar 1 and FFTA. A new upgradient well was installed at both sites. Field adjustments had to be made to the proposed Hangar 1 locations due to access issues. Additional samples were added at Navy's suggestion by the former crash truck garage,

another potential source area (Slide 5). Slide 6 shows soil sampling in the South Lean-To near a portion of the AFFF distribution system. The SB18 soil boring was located near equipment where AFFF was mixed with water: a gallon of either 3% or 6% AFFF solution was mixed with about 100 gallons of water.

Groundwater data were compared to the EPA Provisional Health Advisory values. Since there were no other published screening values, a Navy Marine Corps Public Health Center risk assessor calculated screening values for other media. Standard EPA protocols were used for the calculations for various exposure scenarios based on the zoning including: residential, trespassing, recreation, and construction/maintenance worker. Hangar 1 is zoned as a residential/mixed use area and FFTA is zoned as open space.

The maximum groundwater concentrations from 2010 and 2011 were both from the FFTA (Slide 7). During 2010, the source areas were targeted and the wells sampled in 2011 were selected to determine the extent. Therefore the 2011 concentrations were much lower. PFOA and PFOS exceedances at the FFTA are shown on Slide 8.

The surface water screening levels are much higher than the EPA groundwater values, since they are based on dermal exposure rather than ingestion. PFOA and PFOS were detected in the sediment and surface water at very low concentrations. The two PFCs were detected at concentrations much lower than the calculated screening values in both surface water (Slide 9) and sediment (Slide 10). The maximum concentration for both PFOA and PFOS in surface water and sediment was located just south of FFTA.

The soil results presented on Slide 11 do not include the data from inside the Hangar. The future zoning for Hangar 1 includes residential uses, so child resident and recreator values were calculated, as well as construction worker values. The surface and subsurface soil concentrations are significantly lower than the screening levels. Once the remaining soil data are reported by the laboratory and validated the report will be prepared.

D. Barney presented the discussion of the AOC Hangar 1 Explanation of Significant Differences (ESD). The ESD modified the AOC Hangar 1 ROD as described on Slide 12. He stated that the ESD was sent out for review shortly after Thanksgiving. A Finding of Suitability to Transfer (FOST) for property including Hangar 1 and FFTA had been prepared by the Navy but the property was held back from inclusion in the FOST due to the PFC investigation. The FFTA had been investigated under CERCLA and the MCP, and it was ready to transfer except for PFCs. There were no published screening values for PFCs until 2009. Since the groundwater data from 2010 showed exceedances of the EPA Provisional Health Advisory values, the Navy held back areas previously determined to be suitable to transfer.

An ESD was prepared for AOC Hangar 1 following discussions between the Navy, EPA, MassDEP, SSTTDC, and LNR about whether an action could be taken so some of the holdback areas could be transferred. The wells around Hangar 1 were originally sampled for the routine parameter list, and based on the results a No Further Action ROD was signed. The wells had not been sampled for PFCs and based on the PFC data the area was held back as not being suitable to transfer. Slide 13 shows the extent of PFC contamination in groundwater around Hangar 1. The groundwater under a portion of the Hangar 1 area is classified as a medium yield aquifer and is considered an aquifer protection district (APD) in the SSTTDC Zoning and Land Use By-Laws. The area outside of the APD is not considered useable for drinking water.

The ESD is designed to restrict the use of groundwater for drinking water purposes only in the non-APD portion (Slide 14). The area within the drinking water aquifer that has been impacted by PFCs was still held back. The drinking water restriction on the 22-acre portion of the Hangar 1 area shown on Slide 15 was noted in the deed when the property was transferred as part of FOST 5A in December 2011. The next steps in the PFC investigation are to receive and validate the remaining soil data and prepare the report (Slide 16). The necessary actions to transfer the property will be discussed with the regulators when all the data are received. The Navy plans to prepare an ESD to modify the FFTA ROD to restrict groundwater for drinking water purposes, similar to the AOC Hangar 1 ESD.

M. Parsons asked if the drinking water source area has been addressed yet. What is going to be done about this area? D. Barney responded that it had not yet been addressed. Once the remaining soil results have been received, the Navy will consider what is technically available and discuss options with the regulators. Part of the Building 82 site also overlies this aquifer. There is no aquifer beneath either the Building 81 Site or the SRA Site.

M. Parsons asked what the potential Building 82 remedies were. D. Barney stated that the Navy is likely to try an injection program, but the remedy is yet to be determined. M. Parsons asked what the cleanup for the PFCs was going to be. D. Barney responded that they need to discuss what can/needs to be done. The Navy will review the remaining soil data and then possible actions will be discussed with the regulators. C. Keating added that the land has not been transferred and will not be available for transfer until a decision has been made.

M. Parsons asked if SMP revision 11 was finished. D. Barney stated that there is a meeting next week to discuss priorities.

A. Malewicz clarified that if an area is classified as GW-1, the goal is to maintain the resource and a cleanup would need to make it a suitable source for drinking water. If it is GW-3, there is more flexibility, and it will probably never be used for drinking water. If someone wanted to put in a water supply well,

they would need permits; the safe water yield would protect the GW-1 zone from the lower yield water in the groundwater restriction zone.

- D. Galluzzo asked if the Navy has topographic maps and whether the construction has changed the permeability of the ground surface so that runoff could flow toward the RDA. D. Barney responded that he assumes drainage is being considered as part of the development process. D. Galluzzo is concerned that the Hangar is now a higher elevation than the RDA. D. Barney noted it has always been downhill from Hangar 1 to RDA; however there is a bedrock groundwater divide between the two. Surface water runoff will not move any contamination around: runoff from the newly constructed surfaces will flow to the drainage structures and will not infiltrate into the groundwater. D. Galluzzo expressed his concern about the increase in the amount of impervious surfaces and drainage. D. Barney noted that it should be addressed in the Final Environmental Impact Report or other development documents.
- D. Galluzzo asked who is responsible for runoff from the development that gets into water supplies once the Navy is gone. A. Malewicz stated that Navy is liable under the FFA and the state can also enforce if necessary. The Navy is there for the long term for cleanup issues.
- D. Galluzzo stated his concern about the changes to RDA, and that since the developer is changing the remedy that they should be responsible if any issues come up in the future. A. Malewicz stated that the Navy is ultimately responsible for site cleanup. The road does not compromise the RDA, from a technical standpoint. She added that SSTTDC is responsible as well. C. Keating noted that the EPA reviewed all the plans in consideration of impacts on the RDA. D. Barney stated that the parkway does not impact the cap or the waste material at the RDA. It does not affect the protectiveness of the remedy. The Navy will not allow any development that will increase the Navy's liability. D. Galluzzo stated the parkway shouldn't impact the integrity of the remedy. They suggested placing a traffic barrier inside the fence.
- J. Goodrich stated for clarification that both the Navy and the regulators have reviewed the plans and the planned construction will not impact the RDA remedy. The fence is not the boundary of the waste and the fact the fence is being moved does not impact the remedy. D. Barney added that there is also a trench proposed for landfill gas migration. The Navy's plans are for the trench to be located between the parkway and waste, so the parkway plans do not intersect the cap or the waste. C. Keating stated she would review the line drawings from November to ensure that there would be no impact.
- M. Parsons asked about the MEPA certificate and stated that SSTTDC is not complying with the conditions of the certificate.
- M. Smart asked about the tank location and the location of the piping and turrets in Hangar 1. He also asked if the lines were pressure tested. D. Barney stated that the turret system was probably put it in the

70's and he is unsure if there were pressure tests performed on the piping. The piping goes from the

tanks to the distribution systems and mixing rooms. The tank and infrastructure never went beyond the

footprint of the Hangar.

M. Parsons asked how the AFFF got out to the FFTA. D. Barney stated that they used trucks.

D. Galluzzo asked about the late summer testing at the IOA. D. Barney stated the results are being

compiled and evaluated.

M. Bromberg asked about the characteristics of the PFCs. D. Barney and A. Malewicz responded that

PFCs are a surfactant and are not volatile. AFFF used to take away all the oxygen from the flame.

3. UPDATES AND ACTION ITEMS

Action Items: SSTTDC was not present.

MassDEP Update: None.

IR/EBS Program Site Update: D. Barney stated there was a lot of focus late last year on the closing. As

a result, there was not too much progress to report on Building 81, Building 82, and SRA since

November. Most of the resources since November were supporting the closing and property transfer.

The SRA Feasibility Study will be ready to be discussed at the RAB in April.

The LTM at WGL is in place. A facility inspection was completed, some repairs were performed, and the

wetland inspection was completed. The soil data at STP are being reviewed. The annual report for the

RDA is being prepared. The Small Landfill is in the LTM phase as well. The first annual wetland

inspection was performed at AOC 55C; all other actions are complete. RIA 11 was discussed tonight and

the data are being complied for IOA. An additional sampling plan will be prepared for the old Hangar 2.

He stated that a lot of property was transferred in December. FOST 5C on hold until the PFC work is

complete. FOST 6A is out for public comment; the FOST includes MGEA, AOC 55C, WGL, and Small

Landfill. The remaining land that has not been transferred is under a LIFOC, and is leased to SSTTDC.

M. Bromberg requested that the Navy provide notice of the public comment period for FOSTs when the

document goes out for review. Legal notices were published in the three local newspapers.

M. Smart asked about the repairs to WGL. D. Barney stated that there was some erosion and Shaw

came back and fixed it. Navy is still looking at a few other areas, especially around the level spreaders

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where the water seems to be at the height of the walls. The vegetation will be checked in the spring. M. Bromberg asked about the hay bales at the entrance to WGL near French Stream. There is also black fabric exposed along the road. D. Barney stated he believes that Shaw is waiting for the vegetation around the entrance to take root before the hay bales are removed. A site inspection was just performed. He will review the inspection report to see if it is addressed and will also check the report regarding the black fabric.

A. Malewicz stated that she wanted to make sure the public has a chance to comment on the FOST 6A document. She also suggested working on the RAB minutes to clarify any discrepancies. D. Barney agreed to send an email to the RAB attendees about the FOST. The comment period will be extended on FOST 6A to January 30th. Note: D. Barney sent out an electronic version of FOST 6A via email on January 13, 2012.

A. Malewicz asked if on the RDA trench figures, the distances could be measured from the parkway to demonstrate the waste is not being impacted.

M. Parsons asked if someone from SSTTDC could explain the ESD plans, etc. D. Barney stated that he understands SSTTDC is working on comment responses for the ESD, and they will share them with the regulatory agencies and the Navy. If there are still concerns, Dave's office is always open to go through the figures or go out to the Site.

C. Keating asked if there were any access restrictions since the property was transferred. D. Barney stated that is a question for SSTTDC; there is open space but it is also a construction zone, which may be a safety issue.

D. Galluzzo stated his concern that SSTTDC was not present at the meetings. Thanks to the EPA, the work that SSTTDC has been doing is more consistent with what the regulators and the Navy have been doing. His concerns are based on what SSTTDC is planning. They have not been as transparent as the Navy. M. Parsons added that it is difficult to get responses to comments from SSTTDC.

M. Parsons commented that BHD is leaving trash on the RDA. D. Barney stated that they are notified when debris is noticed around the RDA.

M. Bromberg stated that he felt it is too soon to transfer the WGL in FOST 6A, especially due to the concern about the amount of water in the wetlands at WGL. Isn't there a concern over 100-year storm eroding the WGL like at RDA? Is there a concern about the amount of water along the banks? D. Barney stated that the long term maintenance and monitoring includes inspecting the integrity of the cap and determining if the design is effective. The Navy is still responsible for the LTM and inspections will

monitor the amount of water in the wetlands or any problems that arise, even after the transfer. The riprap stone is in place to ensure that the embankment is not scoured during heavy rain storms. He also noted that the regulators just issued comments on the wetland inspection report and these concerns are addressed in the comments.

D. Barney said they will have the RDA Parkway ESD comments probably by the end of the month and he will pass them along.

Conclusion/Next Meeting

J. Goodrich wrapped up the meeting. The next RAB meeting will be the second Thursday in April (April 12, 2012). Note there is no meeting in March due to a conflict. The meeting will again be held at the New England Wildlife Center, 500 Columbian St., Weymouth, MA. Suggested topics for the next meeting include:

SRA FS